

FILE COPY

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et. seq; the "Act") and Chapter 342, Hawaii Revised Statutes, as amended, and Chapters 11-54 and 11-55, Administrative Rules, Department of Health, State of Hawaii

CITY AND COUNTY OF HONOLULU
DEPARTMENT OF PUBLIC WORKS

is authorized to discharge secondary treated domestic wastewater from the
Wahiawa Sewage Treatment Plant,

located at 111 California Avenue, Wahiawa, Hawaii,

to the receiving waters named Wahiawa Reservoir at coordinates: Latitude 21°29'37"N and Longitude 158°02'34"W (Discharge Serial No. 001),

in accordance with the effluent limitations, monitoring requirements and other conditions set forth in Parts I, II and III herein.

All references to Title 40 of the Code of Federal Regulations are to regulations that are in effect on the effective date of this permit. Unless otherwise specified herein, all terms are defined as provided in the applicable regulations in Title 40 of the Code of Federal Regulations.

This permit will become effective upon issuance.

This permit and the authorization to discharge will expire at midnight, March 1, 1994, and shall not be reissued.

Signed this 7th day of April 1989


(For) Director of Health

XEROX USE ONLY

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A. EFFLUENT LIMITATIONS (Based on a design treatment capacity of 0.1091 m³/sec or 2.49 mgd)

1. During the period beginning on the effective date of this permit and lasting through March 1, 1994, the permittee is authorized to discharge from outfall serial number 001.

a. The discharge of effluent in excess of the following limits is prohibited.

Effluent Characteristic	DISCHARGE LIMITATIONS			
	kg/day (lbs/day)		Other Units (Specify)	
	Monthly Average	Weekly Average	Monthly Average	Weekly Average
Biochemical Oxygen Demand (5 day)	283 (623)	424 (935)	30 mg/l	45 mg/l
Suspended Solids	283 (623)	424 (935)	30 mg/l	45 mg/l
Fecal Coliform Bacteria	N/A	N/A	200/100ml	N/A
pH	Not less than 6.0 standard units nor greater than 9.0 standard units.			

Biomonitoring Toxicity* 50 percent survival in 100 percent effluent

N/A - Not Applicable

*Biomonitoring shall begin three (3) months after the effective date of this permit, in accordance with Section 2.a., below. One year after the effective date of this permit, the discharge limitation becomes effective for each of the species selected.

b. The arithmetic mean values for the effluent samples of BOD5 and suspended solids collected in a period of a 30 consecutive days shall not exceed 15 percent of the arithmetic mean of the values for the influent samples collected at approximately the same times during the same period (85 percent removal).

2. Biomonitoring and Effluent Toxicity Limitation

a. Effluent Biomonitoring

Beginning three (3) months after the effective date of this permit, the permittee shall conduct, or have a contract laboratory conduct, monthly static or flow-through acute bioassays on effluent samples according to the methods described in Methods for Measuring the Acute Toxicity of

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Effluents to Freshwater and Marine Organisms (EPA 600/4-85/013, March 1985) and Adaptation of the Sperm/Fertilization Bioassay Protocol to Hawaiian Sea Urchin Species (P.A. Dinnel, June 1988). Tests will be conducted in 100 percent final effluent which may not be dechlorinated or otherwise treated prior to testing. Tests will be conducted for a period of 96 hours unless the methods specify a shorter period for a definitive test for a particular species (e.g. 48 hours for daphnia). If static tests are used, the daily renewal solutions shall be fresh 24-hour composite samples, unless samples are shipped off-island to a contract laboratory in which case one 24-hour composite samples may be used for all renewals. Tests using locally available species may be conducted at ambient temperature. Test results for each species used will be reported on the permittee's monthly Discharge Monitoring Reports. Results shall be reported as percent survival or, for sea urchin tests, as percent fertilization rate with respect to controls.

b. Species Selection and Discharge Limitation

The permittee shall select one (1) species for biomonitoring from the EPA Methods manual referenced above, or from the following list of locally available species, and notify the Director of the selection within three (3) months of the effective date of this permit. The permittee must obtain approval from the Director before changing species after the initial notification, except that changes between species of sea urchin may be made without prior approval. One year after the effective date of this permit, the discharge limitation becomes effective for each of the species selected.

<u>Species and Life Stage</u>	<u>Discharge Limitation</u>
(1) Water Flea (1-24 hours) <u>Ceriodaphnia dubia</u>	50 percent survival in 100 percent effluent
(2) Fish (1-30 days) <u>Tilapia mossambica</u> <u>Coryphaena hippurus</u>	50 percent survival in 100 percent effluent
(3) Sea Urchin (Gametes/Embryo) <u>Echinometra mathaei</u> <u>Echinometra oblonga</u> <u>Colobocentrotus atratus</u> <u>Heterocentrotus mammillatus</u> <u>Tripneustes gratilla</u>	50 percent mean fertilization rate in 100 percent effluent with respect to control sample

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- (4) Shrimp (0-14 days post larval)
- | | |
|-------------------------|------------------------|
| <u>Penaeus vannamei</u> | 50 percent survival in |
| <u>Penaeus monodon</u> | 100 percent effluent |

Ceriodaphnia may be used in freshwater only. Tilapia and Penaeus vannamei may be acclimated for use in fresh, brackish, or marine water. Penaeus monodon may be used in brackish or marine water. If necessary, the salinity of a discharge may be adjusted using salts to allow testing with marine species.

c. Toxicity Reduction Evaluation

During the first year after the effective date of the permit, it is the permittee's responsibility to perform toxicity reduction evaluations as necessary to achieve compliance with the final toxicity limitation. If after the final toxicity limitation becomes effective, the permittee violates the limitation, the permittee shall increase the biomonitoring frequency to once per week. The frequency shall remain at once per week until the permittee has complied with the toxicity limitation six (6) consecutive times. If the permittee has two (2) consecutive failures of the toxicity limitation, or if requested by the Director, the permittee shall submit, within 45 days, a plan and schedule for conducting a toxicity reduction evaluation. The toxicity reduction evaluation, when completed, shall determine the source of toxicity and how the permittee can achieve the effluent toxicity limitation, including an implementation schedule. After review of the plan by the Director, the permittee shall conduct the evaluation within the specified time frames. Upon completion of the toxicity reduction evaluation, this permit may be modified, or alternatively revoked and reissued, in order to incorporate appropriate permit conditions and compliance schedules. The submission of a toxicity reduction evaluation plan does not waive other remedies or penalties applicable under the Clean Water Act.

B. RECEIVING WATER LIMITATIONS

1. General Criteria

- a. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Department of Health, as required by the Water Quality Act of 1987 (P.L. 100-4) and regulations adopted thereunder.
- b. The receiving water shall be free of substances attributable to the discharge, including:

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- (1) Materials that will settle to form objectionable sludge or bottom deposits.
 - (2) Floating debris, oil, grease, scum, or other floating materials.
 - (3) Substances in amounts sufficient to produce taste or odor in the water or detectable off flavor in the flesh of fish, or in amounts sufficient to produce objectionable color, turbidity or other conditions in the receiving waters.
 - (4) High temperatures; biocides; pathogenic organisms; toxic, radioactive, corrosive, or other deleterious substances at levels or in combination sufficient to be toxic or harmful to human, animal, plant, or aquatic life, or in amounts sufficient to interfere with any beneficial use of the water.
 - (5) Substances or conditions thereof in concentrations which produce undesirable aquatic life.
- c. The discharge from the Wahiawa Sewage Treatment Plant Outfall shall not interfere with the attainment or maintenance of that water quality which assures protection of public water supplies and the protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife and allows recreational activities in and on the water.
- d. The occurrence of a fish kill in the immediate vicinity of the treatment plant outfall shall be evidence of a violation of the general criteria above, and of this permit. A fish kill shall be determined by the presence of more than fifty (50) dead tilapia. In the event of a fish kill, the permittee shall immediately perform the tasks below. These tasks shall be repeated on each day that a fish kill occurs or continues:
- (1) Provide an immediate report of noncompliance under the provisions of Section II.D.6. of this permit.
 - (2) Remove all dead fish and other wildlife from the receiving water, and determine the total number and weight of each species. This information shall be submitted with the written report required under Section II.D.6. A composite sample of muscle and liver tissue shall also be taken from six (6) fishes for analysis.
 - (3) Obtain a grab sample of the treatment plant effluent, and of the receiving water in the center of the affected area.

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These samples shall be analyzed separately for all parameters required to be monitored in the permit, including biomonitoring toxicity. The toxicity shall be reported as the LC50 concentration. The effluent, receiving water, and fish tissue samples shall also be analyzed for all parameters listed in Tables II and III of Appendix D of 40 CFR Part 122, and for the pesticides listed at 40 CFR 125.58(m), and for any other chemical which the permittee may suspect of causing the fish kill. A written report containing the results of all analyses shall be submitted within 30 days of the fish kill.

C. MONITORING REQUIREMENTS

1. Effluent Monitoring

All effluent samples shall be taken downstream from any additions to the treatment plant, and downstream of any in-plant return flows or disinfection units, and prior to mixing with the receiving waters where representative samples of the effluent can be obtained.

Where required, all influent samples shall be taken downstream of any additions to the trunk sewer, and upstream of any in-plant return flows, and prior to treatment where representative samples of the influent can be obtained.

The following shall constitute the effluent monitoring program for outfall serial number 001:

Parameter	Unit	Type of Sample	Minimum Frequency
Flow	MGD	Recorder/Totalizer	Continuous
*BOD5 @20°C	mg/l	24-Hr Composite	Once/Week
*Suspended Solids	mg/l	24-Hr Composite	Once/Week
pH	pH Units	Grab	Once/Week
Total Residual Chlorine	mg/l	Grab	Once/Week
Fecal Coliform	No./100ml	Grab	Once/Week
Biomonitoring Toxicity	% Survival	24-Hr Composite**	Once/Month

*Both the influent and effluent shall be monitored.

**Flow through tests recommended where possible.

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D. SCHEDULE OF COMPLIANCE

The permittee shall submit an annual report describing progress towards the elimination of the discharge by the permit expiration date.

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A. GENERAL CONDITIONS

1. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

2. Toxic Pollutants

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

3. Penalties for Violations of Permit Conditions

Any person who violates a permit condition is subject to a civil penalty not to exceed \$10,000 per day for each violation. Any person who willfully or negligently violates permit conditions is subject to a fine of not less than \$2,500 nor more than \$25,000 per day for each violation, or by imprisonment for not more than one (1) year, or both.

4. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

5. Permit Actions (Modification, Revocation and Reissuance, or Termination)

- (a) This permit may be modified, revoked and reissued, or terminated for cause (as described in 40 CFR Subsections 122.62, 122.63, and 122.64), including, but not limited to: (1) Violation of any terms or conditions of this permit; (2) Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or (3) A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

- (b) Notwithstanding Part II-A-5(a) above, if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Clean Water Act for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition.
- (c) Notwithstanding Part II-A-5(a) above, this permit may be modified, or alternatively revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(A), (C), (D), (E) and (F), or 304(b)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved contains different conditions or is otherwise more stringent than any effluent limitation in this permit; or controls any pollutant not limited in this permit.

6. Effect of Permit/Other Laws

- (a) Issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to persons or property, or invasion of other private rights, or any infringement of Federal, State or local laws or regulations.
- (b) Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Clean Water Act.
- (c) Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.
- (d) Except as provided in permit conditions on "Upset," Part II-B-4 below, and pH Excursions, Part II-C-7 below, nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance with a permit condition.
- (e) Pursuant to Section 509(b)(1)(F) of the Clean Water Act, a challenge to the validity of permit conditions, including the effluent limitations in Part I-A of this permit, shall not be a

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defense to an enforcement action under Section 309 or 505 of the Clean Water Act. Each and every violation of a permit condition is subject to an enforcement action.

- (f) Compliance with the terms of this permit does not constitute a defense to any action brought under Section 504 of the Clean Water Act, or any other law governing protection of public health or welfare, for any imminent and substantial endangerment of public health or welfare.

7. Onshore or Offshore Construction

This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities or the undertaking of any work in any waters of the United States.

8. Inspection and Entry

The permittee shall allow the Director, the Regional Administrator, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect at reasonable time any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- (d) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

9. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

10. State Water Quality Standards

The permittee shall comply with State Water Quality Standards for the water area in which the discharge is located, except for any

water quality parameter for which a zone of mixing has been granted by the Director, provided that best treatment or control technology has been applied.

B. OPERATION AND MAINTENANCE

1. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

2. Need to Halt or Reduce not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Bypass of Treatment Facilities

(a) Definitions

- (1) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
- (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

(b) Bypass not exceeding limitations

The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts II-B-3(c) and (d), below.

(c) Notice

- (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least ten (10) days before the date of the bypass (including an evaluation of the anticipated quality and effect of the bypass).
- (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II-D-6 (24-hour notice).

(d) Prohibition of bypass

Bypass is prohibited and the Regional Administrator and the Director may take enforcement action against the permittee for bypass, unless:

- (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (3) The permittee submitted notices as required under Part II-B-3(c) above.
- (e) The Regional Administrator and the Director may approve an anticipated bypass, after considering its adverse effects, if the Regional Administrator and the Director determines that it will meet the three (3) conditions listed above in Part II-B-3(d).

4. Upset

(a) Definition

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error,

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improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

(b) Effect of an upset

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Part II-B-4(c), below, are met. No determination made during administrative review of claims that noncompliance was caused by an upset, and before an action for noncompliance, is final administrative action subject to judicial review.

(c) Conditions necessary for a demonstration of upset

A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- (1) An upset occurred and that the permittee can identify the specific cause(s) of the upset;
- (2) The permitted facility was at the time being properly operated;
- (3) The permittee submitted notice of the upset as required in Part II-D-6 (24-hour notice); and
- (4) The permittee complied with any remedial measures required under Part II-A-5.

(d) Burden of proof

In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

5. A Schedule of Maintenance

Any maintenance of facilities, which might necessitate unavoidable interruption of operation and degradation of effluent quality, shall be scheduled during noncritical water quality periods and carried out in a manner approved by the Director and the Regional Administrator.

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6. Power Failures

In order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall either:

In accordance with the Schedule of Compliance contained in Part I, provide an alternative power source sufficient to operate the wastewater control facilities;

or, if such alternative power source is not in existence, and no date for its implementation appears in Part I,

Halt, reduce or otherwise control production and/or all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater control facilities.

7. Removed Substances

This permit does not authorize discharge of solids, sludge, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters to waters of the United States unless specifically limited in Part I-A. All solids, sludges, filter backwash, or other pollutants removed from, or resulting from the treatment or control of discharges must be disposed of in accordance with all applicable Federal, State, and Local requirements.

C. MONITORING AND RECORDS

1. Representative Sampling

Samples and measurements taken for the purposes of monitoring shall be representative of the volume and nature of the monitored activity.

2. Sampling Points

All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified, before the effluent joins or is diluted by any other wastestream, body of water, or substance. Monitoring points shall not be changed without notification to and the approval of the Director and the Regional Administrator.

3. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to insure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated

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and maintained to insure that the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than \pm ten percent (10%) from the true discharge rates throughout the range of expected discharge volumes. Once-through condenser cooling water flow which is monitored by pump logs, or pump hour meters as specified in Part I of this permit and based on the manufacturer's pump curves shall not be subject to this requirement. Guidance in selection, installation, calibration and operation of acceptable flow measurement devices can be obtained from the following references:

- (a) "A Guide of Methods and Standards for the Measurement of Water Flow," U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 421, May 1975, 97 pp. (Available from the U.S. Government Printing Office, Washington, D.C. 20402. Order by SD catalog No. C13.10:421.)
- (b) "Water Measurement Manual," U.S. Department of Interior, Bureau of Reclamation, Second Edition, Revised Reprint, 1974, 327 pp. (Available from the U.S. Government Printing Office, Washington, D.C. 20402. Order by catalog No. 127.19/2:W29/2, Stock No. S/N 24003-0027.)
- (c) "Flow Measurement in Open Channels and Closed Conduits," U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 484, October 1977, 982 pp. (Available in paper copy or microfiche from National Technical Information Service (NTIS), Springfield, VA 22151. Order by NTIS No. PB-273 535/5ST.)
- (d) "NPDES Compliance Flow Measurement Manual," U.S. Environmental Protection Agency, Office of Water Enforcement, Publication MCD-77, September 1981, 135 pp. (Available from the General Services Administration (8BRC), Centralized Mailing Lists Services, Building 41, Denver Federal Center, Denver, CO 80225.)

4. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

5. Calibration

The permittee shall periodically calibrate and perform maintenance on all monitoring and analytical equipment used to monitor the pollutants discharged under this permit, at intervals which will ensure the accuracy of measurements.

6. Testing Variability Not a Defense

If the permittee believes or has reason to believe that monitoring or sampling results reflect an analytical variability so as to render the results inaccurate, he may monitor or sample more frequently than required by this permit. The validity of the testing results, whether or not the permittee has monitored or sampled more frequently, shall not be a defense to an enforcement action under Subsection 309 or 505 of the Clean Water Act.

7. pH Effluent Limitations Under Continuous Monitoring

Notwithstanding Part I of this permit, where the permittee continuously measures the pH of wastewater pursuant to a requirement or option in this permit, excursions from the range provided in Part I-A are permitted, provided:

- (a) The pH limitation in Part I-A of this permit is based upon a requirement imposed under 40 CFR Subchapter N, Effluent Guidelines and Standards;
- (b) The total time during which the pH values are outside the required range of pH values shall not exceed 446 minutes in any calendar month;
- (c) No individual excursions from the range of pH values shall exceed 60 minutes; and
- (d) For purposes of this section, an "excursion" is an unintentional and temporary incident in which the pH value of discharge wastewater exceeds the range set forth in Part I-A of this permit. The number of individual excursions exceeding 60 minutes and the total accumulated excursion time in minutes occurring in any calendar month shall be reported in accordance with Part II-D-5 of this permit.

8. Penalties for Tampering

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per

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violation, or by imprisonment for not more than six (6) months per violation, or by both.

9. Retention of Records

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recording for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Administrator or the Director at any time. This period shall be extended automatically during the course of any unresolved litigation regarding the discharge of pollutants by the permittee or regarding promulgated effluent guidelines applicable to the permittee.

10. Monitoring Records

Records of monitoring information shall include:

- (a) The exact place, date, and time of sampling or measurements;
- (b) The individual(s) who performed the sampling or measurements;
- (c) The date(s) the analyses were performed;
- (d) The individual(s) who performed the analyses;
- (e) The analytical techniques or methods used; and
- (f) The results of such analyses.

11. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report (DMR) pursuant to Part II-D-5. Such increased frequency shall also be indicated.

12. Averaging of Measurements

Calculations for limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

D. REPORTING REQUIREMENTS

1. Planned Changes

The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- (a) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or
- (b) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under Part II-D-8.

2. Change in Discharge

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of this permit. Any anticipated facility expansions, production increases, or process modifications which will result in new, different, or increased discharges of pollutants must be reported by submission of a new NPDES application at least 180 days prior to commencement of such discharges, or if such changes will not violate the effluent limitations specified in this permit, by notice in writing, to the Director of such changes. Following such notice, the permit may be modified or revoked and reissued pursuant to 40 CFR Section 122.62(a) to specify and limit any pollutants not previously limited.

Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by the permit constitutes a violation.

3. Anticipated Noncompliance

The permittee shall give advance notice to the Regional Administrator and the Director of any planned change in the permitted facility or activity which may result in noncompliance with permit requirements. Any maintenance of facilities, which might necessitate unavoidable interruption of operation and degradation of effluent quality, shall be scheduled during noncritical water quality periods and carried out in a manner approved by the Regional Administrator and the Director.

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4. Transfer

- (a) In the event of any change in ownership or control of facilities from which the authorized discharge emanates, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Regional Administrator and the Director.
- (b) This permit is nontransferrable to any person except after notice to the Regional Administrator and the Director and compliance with Part II-D-4(b)(2) below.
 - (1) Transfers by modification. Except as provided in Part II-D-4(b)(2) below, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued (under 40 CFR Section 122.62(b)(2)), or a minor modification made (under 40 CFR Section 122.63(d)), to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act.
 - (2) Automatic transfers. This permit may be automatically transferred to a new permittee if:
 - (i) The permittee notifies the Regional Administrator and the Director at least thirty (30) days in advance of the proposed transfer date;
 - (ii) The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
 - (iii) The Regional Administrator or the Director does not notify the existing permittee and the proposed new permittee of his or her intent to modify or revoke and reissue the permit. A modification under this subpart may also be a minor modification under 40 CFR Section 122.63. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part II-D-4(b)(2)(ii) above.

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5. Reporting of Monitoring Results

Monitoring results obtained during the previous calendar months shall be summarized for each month and reported on a DMR Form (EPA No. 3320-1). The results of all monitoring required by this permit shall be submitted in such a format as to allow direct comparison with the limitations and requirements of this permit. Monitoring reports shall be postmarked no later than the 28th day of the month following the completed reporting period. Duplicate signed copies of these, and all other reports required herein, shall be submitted to the Regional Administrator and the Director at the following addresses:

Regional Administrator
U.S. Environmental Protection Agency
Region 9, Water Management Division
AZ-NV-HI Branch, W-4
215 Fremont Street
San Francisco, CA 94105

Director of Health
State Department of Health
Environmental Protection and
Health Services Division
1250 Punchbowl Street
Honolulu, HI 96813

6. Immediate Reporting of Noncompliance

The permittee (means executive officer or ranking elected official) shall orally report any noncompliance which may endanger health or the environment. Incidences of noncompliance shall be provided orally, immediately from the time the permittee becomes aware of the circumstances. The written submission shall also be provided within five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including dates and times, and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The following shall be included as information which must be reported immediately for bypass and upsets of 1,000 gallons or more:

- (a) An unanticipated bypass which exceeds any effluent limitation in the permit;
- (b) Any upset which exceeds any effluent limitation in the permit; and
- (c) Violation of a maximum daily discharge limitation for any toxic pollutant or hazardous substance, or any pollutant specifically identified as the method to control a toxic pollutant or hazardous substance, listed as such by the Regional Administrator and the Director in this permit to be reported.

Notification of bypass or upsets of less than 1,000 gallons shall be reported within 24 hours from the time the permittee becomes aware of the circumstances.

Reports should be made to telephone (808)548-6355. In addition, the major wire services (UPI and AP) and for neighbor island occurrences the Department of Health Offices shall be notified in a notification list to be provided. The Regional Administrator and the Director may waive the written report on a case-by-case basis if the oral report has been received immediately.

7. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Parts II-D-5, and 6 above at the time monitoring reports are submitted. The reports shall contain the information listed in Part II-D-6 above.

8. Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Administrator and the Director, it shall promptly submit such facts or information.

9. Duty to Provide Information

The permittee shall furnish to the Regional Administrator and the Director, within a reasonable time, any information which the Regional Administrator and the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Regional Administrator and the Director, upon request, copies of records required to be kept by this permit.

10. Signatory Requirements

All applications, reports, or information submitted to the Regional Administrator and the Director shall be signed and certified in accordance with 40 CFR 122.22.

11. Availability of Reports

Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit

shall be available for public inspection at the offices of the Regional Administrator and the Director. As required by the Clean Water Act, permit applications, permits and effluent data shall not be considered confidential.

12. Penalties for Falsification of Reports

The Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six (6) months per violation, or by both.

E. DEFINITIONS

1. Average

The arithmetic mean of values taken at the frequency required for each parameter over the specified period. For fecal coliform, the average shall be the geometric mean. For total coliform, the average shall be the median.

2. Mass/Day Measurements

- (a) The "daily discharge" is the total mass (weight) of a pollutant discharged during a calendar day. The daily discharge shall be determined by using the following equations:

$$\text{Daily Discharge (lbs/day)} = 8.34 \times Q \times C;$$

$$\text{Daily Discharge (kg/day)} = 3.785 \times Q \times C; \text{ and}$$

where "C" (in mg/l) is the measured daily concentration of the pollutant, as defined in Part II-E-3(a), and "Q" (in million gallons per day) is the measured effluent flow rate for the same calendar day.

If only one sample is taken during any calendar day, the mass (weight) of pollutant discharged that is calculated from it is the "daily discharge."

- (b) The "average monthly discharge" is defined as the total mass of all daily discharges sampled and/or measured during a calendar month on which daily discharges are sampled and measured, divided by the number of daily discharges sampled and/or measured during such month. It is, therefore, an arithmetic mean found by adding the weights of the pollutant found each

day of the month and then dividing this sum by the number of days the tests were reported. This limitation is identified as "Daily Average" or "Monthly Average" in Part I of the permit and the average monthly discharge value is reported in the "Average" column under "Quantity" on the DMR.

- (c) The "average weekly discharge" is defined as the total mass of all daily discharges sampled and/or measured during the calendar week on which daily discharges are sampled and/or measured during such week. It is, therefore, an arithmetic mean found by adding the weights of pollutants found each day of the week and then dividing this sum by the number of days the tests were reported. This limitation is identified as "Weekly Average" in Part I of this permit and the average weekly discharge value is reported in the "Maximum" column under "Quantity" on the DMR.
- (d) The "maximum daily discharge" is the highest daily discharge value recorded during the reporting period. This limitation is identified as "Daily Maximum" in Part I of this permit and the maximum daily discharge value is reported in the "Maximum" column under "Quantity" on the DMR.

3. Concentration Measurements

- (a) The "daily concentration" is the concentration of a pollutant discharged during a calendar day. It is equal to the concentration of a composite sample or in the case of grab samples, it is the arithmetic mean (weighted by flow value) of all samples collected during that calendar day. If only one sample is taken during any calendar day, it represents the "daily concentration."
- (b) The "average monthly concentration," other than for fecal or total coliform bacteria, is the sum of the daily concentrations sampled and/or measured divided by the number of daily discharges sampled and/or measured during such month (arithmetic mean of the daily concentration values). The average monthly count for fecal coliform bacteria is the geometric mean of the counts for samples collected during a calendar month. The average monthly count for total coliform is the median of the counts for samples collected (not less than five (5) discrete samples) during a calendar month. This limitation is identified as "Monthly Average" or "Daily Average" under "Other Limits" in Part I of this permit and the average monthly concentration value is reported under the "Average" column under "Quality" on the DMR.

- (c) The "average weekly concentration," other than for fecal or total coliform bacteria, is the sum of the concentrations of all daily discharges sampled and/or measured during a calendar week on which daily discharges are sampled and measured divided by the number of daily discharges sampled and/or measured during such week (arithmetic mean of the daily concentration values). The average weekly count for fecal coliform bacteria is the geometric mean of the counts for samples collected during a calendar week. The average weekly count for total coliform is the median of the counts for samples collected during a calendar week. This limitation is identified as "Weekly Average" under "Other Limits" in Part I of this permit and the average weekly concentration value is reported under the "Maximum" column under "Quality" on the DMR.
- (d) The "maximum daily concentration" is the highest daily concentration value recorded during the reporting period. This limitation identified as "Daily Maximum" under "Other Limits" in Part I of this permit and the maximum daily concentration is reported under the "Maximum" column under "Quality" on the DMR.

4. Other Measurements

- (a) The effluent flow expressed as cubic meters/day (MGD) is the 24-hour average flow averaged monthly. It is the arithmetic mean of the total daily flows recorded during the calendar month. Where monitoring requirements for flow are specified in Part I of this permit, the flow rate values are reported in the "Average" column under "Quantity" on the DMR.
- (b) An "instantaneous flow measurement" is a measure of flow taken at the time of sampling, when both the sample and flow will be representative of the total discharge.
- (c) Where monitoring requirements for pH, dissolved oxygen or fecal coliform bacteria are specified in Part I of this permit, the values are generally reported in the "Quality or Concentration" column on the DMR.

5. Types of Samples

- (a) "Grab sample" means an individual sample collected at a randomly-selected time over a period not exceeding 15 minutes.
- (b) "Composite sample" means a combination of at least 8 sample aliquots, collected at periodic intervals during the operating hours of facility over a 24 hour period. The composite must be flow proportional; either the time interval

between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically.

6. Calculation of Means

- (a) The "arithmetic mean" of any set of values is the summation of the individual values divided by the number of individual values.
- (b) The "geometric mean" of any set of values is the N^{th} root of the product of the individual values where N is equal to the number of individual values. The geometric mean is equivalent to the antilog of the arithmetic mean of the logarithms of the individual values. For purposes of calculating the geometric mean, values of zero (0) shall be considered to be one (1).
- (c) "Weighted by flow value" means the summation of each concentration times its respective flow divided by the summation of the respective flows.
- (d) The "median" of any set of ordered values is the value below and above which there is an equal number of values or which is the arithmetic mean of the two middle values if there is no one middle number.

7. Calendar Day

A calendar day is defined as the period from midnight of one day until midnight of the next day. However, for the purposes of this permit, any consecutive 24-hour period that reasonably represents the calendar day may be used for sampling.

8. Removal Efficiency

"Removal efficiency" is the ratio of pollutants removed by the treatment unit to pollutants entering the treatment unit. Removal efficiencies of a treatment plant shall be determined using the average monthly concentrations (C, in mg/l) of influent and effluent samples collected about the same time and the following equation (or its equivalent):

$$\text{Removal Efficiency (\%)} = 100 \times \left(1 - \frac{C_{\text{effluent}}}{C_{\text{influent}}} \right)$$

A. OTHER REQUIREMENTS

1. In accordance with 40 CFR 122.42, the permittee shall notify the Regional Administrator and the Director of any of the following changes:
 - (a) Any new introduction of pollutants into the treatment facility from an indirect discharger (i.e. other publicly owned facilities or industrial sources).
 - (b) Any substantial change in the volume or character of pollutants being introduced into the treatment facility by an existing source.

Notification shall be made within thirty (30) days of any changes. The permittee shall include information on the quality and quantity of effluent introduced and any anticipated impact on the quality or quantity of effluent discharged from the treatment facility.

B. SLUDGE REQUIREMENTS

1. General Compliance

The permittee shall comply with all existing Federal and State laws and regulations that apply to its sewage sludge use and disposal practice(s), and with the Clean Water Act Section 405(d) technical standards when promulgated. If an applicable management practice or numerical limitation for pollutants in sewage sludge is promulgated under Section 405(d) of the Clean Water Act after issuance of this permit and is more stringent than the sludge pollutant limit or management practice specified in this permit or in existing Federal or State laws or regulations, this permit shall be promptly modified or revoked and reissued to conform to the regulations promulgated under Section 405(d) of the Clean Water Act. The permittee shall comply with the limitations by no later than the compliance deadline specified in the applicable regulations as required by Section 405(d) of the Clean Water Act.

2. Reporting Requirements

The permittee shall submit to the Director by January 28 of each year, an annual report summarizing sludge handling and disposal activities. This report shall include:

- (a) A map showing sludge handling facilities (e.g. digesters, lagoons, drying beds, incinerators).
- (b) The quantity of sludge produced.

- (c) The treatment applied to sludges including process parameters. For example, if the sludge is digested, report the average temperature and retention time of the digesters. If drying beds are used, report depth of application and drying time. If composting is used, report the temperature achieved and duration. Also report dewatering methods and percent solids of final waste.
- (d) Disposal methods (e.g. 50% to landfill, 40% land applied, 10% sold as commercial product). Report the names and locations of all facilities receiving waste.
- (e) Concentrations of cadmium, copper, nickel and zinc from at least one (1) sludge sample if any of the sludge is land applied or commercially sold.

3. Notice of Change in Sludge Disposal Practice

The permittee shall give prior notice to the Director of any change(s) planned in the permittee's sludge use or disposal practice.

4. Cause for Modification

Under 40 CFR Section 122.62(a)(1), a change in the permittee's sludge use or disposal practice is a cause for modification of the permit. It is a cause for revocation and reissuance of the permit if the permittee requests or agrees.

C. REQUIREMENTS FOR THE RECEIPT OF HAULED WASTES

It is the permittee's responsibility to ensure that all wastes received by waste haulers, who are authorized by the permittee to discharge to the Wahiawa treatment plant or collection system, are compatible with the treatment plant and do not cause violations of this permit. In order to ensure compliance with this condition, the permittee shall establish a written "Waste Hauler Program" (Program) for tracking and monitoring hauled wastes, and enforcing the provisions of this permit, and shall provide the requisite funding and personnel to implement the Program. The Program shall be submitted to the Director for approval within 3 months of the effective date of this permit, and shall meet the minimum requirements below. Upon approval, the Program will become an enforceable condition of this permit.

- 1. The permittee shall require that all authorized waste haulers, including its own, keep a written record of each load discharged to the Wahiawa treatment plant or collection system. This record shall include the name and/or address of each residence or facility which contributed to the waste load, and the estimated volume of each

load. The permittee shall require submission of copies of all such records on a routine basis (e.g. once per month).

2. The permittee shall have the capability to sample any waste load it authorizes to be discharged to the Wahiawa treatment plant or collection system. The permittee's Program shall provide for sampling and analysis as follows:
 - (a) The Program shall specify the frequency of periodic sampling and analysis of wastes hauled from private residences and residential buildings. The Program shall also specify the parameters to be analyzed.
 - (b) The permittee shall prohibit the discharge of any load containing waste (including domestic waste) from any agricultural, commercial, or industrial facility, without notification of the treatment plant operator prior to discharge. The permittee shall take and preserve a sample of all such loads, and shall record the identity of the hauler, waste source, and approximate volume of each load. All samples shall be refrigerated and kept for at least 48 hours. The Program shall provide for analysis of any sample which appears to contain non-domestic wastes, and for periodic random analysis of additional samples. The Program shall specify the frequency of analysis and the parameters to be analyzed. In the event of a plant upset, fish kill, or other indication that the plant may have received a toxic load, the Program shall provide for analysis of all samples on hand.
3. The permittee shall require that any agricultural, commercial, or industrial facility, disposing of process wastes to the Wahiawa treatment plant by waste hauler, submit an application specifying the process pollutants, the quantities disposed, and a chemical analysis of the waste. The Program shall provide for periodic inspection of such facilities, and shall specify an enforcement strategy for facilities which fail to provide information, discharge unauthorized wastes, or otherwise violate the conditions of the Program.
4. The permittee shall submit an annual Program report containing the following information:
 - (a) an estimate of the total volume and mass of BOD₅ and suspended solids discharged by waste haulers.
 - (b) a list of all agricultural, commercial, and industrial facilities contributing hauled wastes. The list shall identify each facility which disposes of process wastes by waste hauler, the specific pollutants contained in such wastes, and whether

any of these facilities are subject to Federal Categorical Standards.

- (c) the results of all analyses performed in the previous year.
- (d) a list of all inspections and enforcement actions performed or taken in the previous year.

N0316MTa

PERMIT ISSUED

Date APR - 7 1989

ATTACHMENT

OAHU NOTIFICATION

**DEPARTMENT OF HEALTH
ENVIRONMENTAL PROTECTION AND HEALTH SERVICES DIVISION**

Pollution Investigation and Enforcement Branch (PIE)	(808)548-6355 (This phone number is contained in some of the permits.)
Hawaii State Hospital, Kaneohe	(808)247-2191 (For use during nonregular office hours.)

UNITED PRESS INTERNATIONAL (UPI)

Bureau Chief or Duty Editor	(808)533-1828 (Honolulu) 5:30 am - 1:00 am (Daily)
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ASSOCIATED PRESS (AP)

Bureau Chief or Duty Editor	(808)533-2422 or 536-5510 (Honolulu) 4:00 am - 11:30 pm (Monday - Friday) 5:00 am - 11:30 pm (Saturday and Sunday)
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NOTES

1. In addition to notifying the PIE Branch of upset/bypass occurrences, both the UPI and AP news wire services shall be informed.
2. Notification of specific news media (newspaper, television, radio, etc.) is left to the discretion of the permittee. It is generally assumed that the specific news media are subscribers to either or both of the UPI and AP major wire services.
3. Suggested Notifications

Oahu Incidents - Calls can be made to 525-8000, the Hawaii Newspaper Agency switchboard, and requests should be made to be switched to the City Desk at both papers. After-hour numbers are listed in the phone book under the Advertiser and the Star-Bulletin.

IN THE DEPARTMENT OF HEALTH
STATE OF HAWAII

COPY

DEPARTMENT OF HEALTH,
STATE OF HAWAII,

vs.

CITY AND COUNTY OF HONOLULU

NPDES PERMIT NO. HI 0020125

WAHIAWA WASTEWATER TREATMENT
PLANT

FINAL DECISION AND ORDER

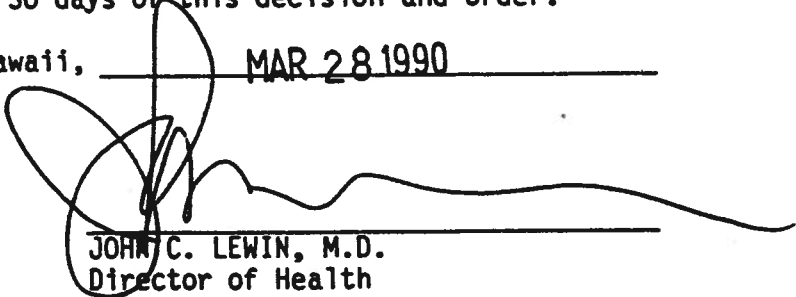
FINAL DECISION AND ORDER

Pursuant to the Findings of Fact and Conclusions of Law, in the attached hearing officer's report, which are hereby adopted as the Final Findings of Fact and Conclusions of Law, and the record herein, and pursuant to Hawaii Revised Statutes, Chapters 91 and 342D,

IT IS HEREBY DECIDED AND ORDERED that:

1. NPDES Permit No. HI 0020125, issued on April 7, 1989, shall remain unchanged with the exception that the last sentence of Part I.B.1.d.(3) shall require that: "A written report containing the results of all analyses shall be submitted within 60 days of the fish kill," instead of within 30 days as originally specified in the permit; and
2. The City and County of Honolulu shall submit a written "Waste Hauler Program" as required by Condition III.C of the permit within 30 days of this decision and order.

DATED: Honolulu, Hawaii, MAR 28 1990


JOHN C. LEWIN, M.D.
Director of Health

IN THE DEPARTMENT OF HEALTH
STATE OF HAWAII

DEPARTMENT OF HEALTH,
STATE OF HAWAII,

vs.

CITY AND COUNTY OF HONOLULU

) NPDES PERMIT NO. HI 0020125

) WAHIAWA WASTEWATER TREATMENT
) PLANT

) CERTIFICATE OF SERVICE

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that I served the document listed herein by
mailing, via certified mail, return receipt requested (#P 960-741-574), on
MAR 28 1990, a copy of the document to the person named
herein at the address indicated.


DOCUMENT:

Final Decision and Order

PERSON SERVED AND ADDRESS:

Mr. Sam Callejo
Director and Chief Engineer
Department of Public Works
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

DATED: Honolulu, Hawaii, MAR 28 1990



DENIS R. LAU, CHIEF
Clean Water Branch

AL:auc

cc: Attorney General, State of Hawaii
EPA, Region 9, Water Management Division,
Permits Issuance Section (W-5-1)

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